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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,466	10/17/2003	Rainer Bruns	CH-7973/LeA 36,310	3054
34947	7590	09/25/2006	EXAMINER	
LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112			ARNOLD, ERNST V	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/688,466

Applicant(s)

BRUNS ET AL.

Examiner

Ernst V. Arnold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1 and 3-10 are pending in the Application.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/7/06 has been entered.

Applicant is advised to fix the typographical error in the last word "micorbiocides" in claim 5.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 5-10 are rejected under 35 U.S.C. 102(a) as being anticipated by JP2003252705A (Applicant cited reference filed on 3/29/04).

The Examiner is relying upon and has supplied an English language translation of the Japanese publication for Applicant's benefit.

JP2003252705A discloses a composition containing a quaternary ammonium salt compound, a compound containing copper and a triazole compound [0004].

JP2003252705A discloses copper salts and copper oxide in the composition [0005].

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JP2003252705A discloses ipconazole as the triazole and discloses that one or more of the triazoles can be used in the composition thus reading on instant claim 1 [0007].

JP2003252705A discloses treating wood, an article of matter containing industrial materials and a habitat for microorganisms, with the composition to assess preservation from decay effects and anti-protection thus reading on the instant process claims 5-8 and 10 ([0012]-[0024]). JP2003252705A discloses adding solvents to the composition such as ethanol, an antimicrobial active compound, thus reading on instant claims 8 and 9 [0008].

***Claim Rejections - 35 USC § 102***

Claims 1 and 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese publication number 2003095829 (Applicant cited reference filed on 3/29/04).

The Examiner is relying upon and has supplied an English language translation of the Japanese publication for Applicant's benefit.

JP2003095829 discloses an industrial antibacterial composition with a triazole first component, ipconazole, and at least one kind of compound selected from pyridine based compounds of sodium, zinc or copper and various solvents thus reading on instant claims 1 and 8 ([0006] and [0009]). JP2003095829 discloses that two or more of the active principle [0007]. JP2003095829 discloses the industrial materials include coatings, plastics, fiber and wood [0006].

***Claim Rejections - 35 USC § 102***

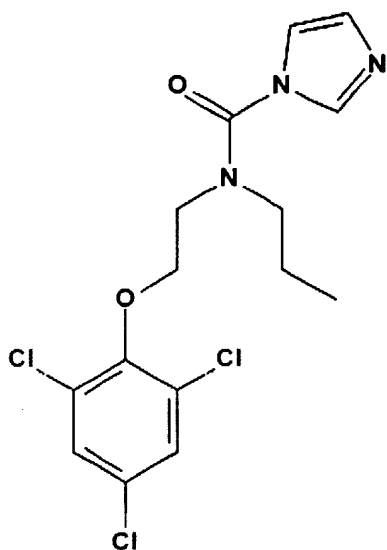
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 8 and 9 remain rejected under 35 U.S.C. 102(b) as being anticipated by Tateishi et al. (EP0677246).

Tateishi et al. provide a fungicidal composition designed to target microorganisms having resistance to benzimidazole fungicides. The fungicidal composition of Tateishi et al. contains at least one fungicidal compound selected from the group consisting of benomyl, cypendazole, carbendazim, EBC, thiabendazole, fuberidazole, dimetbenzazol, thiophanate methyl and thiophanate with ipconazole thus meeting the limitations of instant claim 1 (See: Abstract and page 7, claim 1). Tateishi et al. disclose that the composition can be mixed with other fungicides to prevent pathogenic crop disease in a wider range (Page 4, lines 34-36). Tateishi et al. disclose that prochloraz (an imidazole type fungicide of instant claim 1) can be used in the composition (Page 4, line 37). The Examiner notes that the structure of prochloraz contains a substituted phenol.



Prochloraz



In addition, Tateishi et al. disclose other fungicides such as tachigaren (an oxazole), thiuram (a dithiocarbamate), kasugamycin (an aminoglycoside), captan (a phthalimide), probenazole (a benzisothiazole), triflumizole (an imidazole), pefurazoate (an imidazole), copper agents etc... (Page 4, lines 34-37). Tateishi et al. further disclose that the mixing ratio of ipconazole to the compound belonging to group B in a weight ratio preferably in the range of 1:0.1 to 1:100 which reads on instant claim 3 (Page 4, lines 12-13). In Example 3, Tateishi et al. prepare a suspension concentrate that contains ethylene glycol. Ethylene glycol has been regulated since 1988 as a pesticide as per the Federal Insecticide, Fungicide and Rodenticide Act therefore meeting the limitations of instant claims 4, 8 and 9 (See: reference U on the previous PTO-892).

***Claim Rejections - 35 USC § 102***

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP05221812A.

The Examiner is relying upon and has supplied an English language translation of the Japanese publication for Applicant's benefit.

JP05221812A discloses a composition containing ipconazole, a carbonate and a copper compound where the carbonate can be an ammonium carbonate and the copper compound can be a salt ([0004], [0005] and [0008]). JP05221812A discloses various additives that can be blended with the composition thus reading on instant claim 8 [0007].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateishi et al. (EP0677246) in view of Arahira et al. (EP0341954).

Applicant claims an active compound mixture comprising ipconazole and

b) at least one further fungicidally active compound selected from the group consisting of the metal salts or metal oxides, sulphamides, triazoles, imidazoles, morpholine derivatives, dodemorph and its salts with arylsulphonic acids, benzothiazoles, isothiazolinones, thiocyanates, quaternary ammonium compounds and guanidines, iodine derivatives selected from the group consisting of diiodomethyl-p-tolyl sulphone and 3-iodo-2-propynyl-n-butylcarbamate, phenols, pyridines, methoxyacrylates, and quinolines, and imidazoles selected from the group consisting of clotrimazole, climbazole, imazalil, ketoconazole, prochloraz, and their metal salts and acid adducts.

Applicant claims a process of protecting industrial materials comprising applying thereto an active compound mixture.

#### **Determination of the scope and content of the prior art**

**(MPEP 2141.01)**

The reference of Tateishi et al. is discussed in detail above and that discussion is hereby incorporated by reference.

Ahahira et al. disclose the use of biocidal compositions that contain an azole derivative (for example, ipconazole) for preventing deterioration of industrial materials including paper, lumber, leather, paints, plastics, metals and inorganic materials and products formed by such materials (See: Abstract; page 2, lines 3, 29-33 42-43; page 3, lines 17-22 and claims 1-4, for example).



**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

1. Tateishi et al. do not expressly disclose a composition comprising metal salts or metal oxides; sulphamides, dodemorph, thiocyanates, ammonium compounds, guanidines, iodine derivatives, pyridines, methoxyacrylates, quinolines and the imidazoles clotrimazole, climbazole, imazalil, or ketoconazole.

2. Tateishi et al. do not expressly teach the use of applying the fungicidal composition to industrial materials including wood, woodbased materials, plastics, cooling lubricants and coating systems, such as paints, varnishes or plaster.

**Finding of prima facie obviousness  
Rational and Motivation (MPEP 2142-2143)**

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the various other known fungicides to the composition of Tateishi et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the teachings of Tateishi et al. suggest the addition of other fungicides, which would be readily known to one of ordinary skill in the art (Page 4, lines 34-37). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very

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same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply the composition of Tateishi et al. to industrial materials including wood, woodbased materials, plastics, cooling lubricants and coating systems, such as paints, varnishes or plaster, as suggested by Ahahira et al., and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the number of benzimidazole resistant microorganisms is growing and the composition of Tateishi et al. is effective against benzimidazole resistant microorganisms. By increasing the lifetime of the industrial material, a beneficial cost savings is earned by decreasing the frequency of replacement of the material.

In the absence of any criticality/unexpected results, the presently claimed invention is considered *prima facie* obvious over the prior art for the reasons of record and those stated above.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

No claims are allowed.

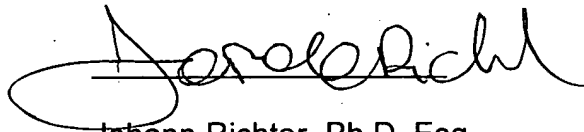
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ernst Arnold  
Patent Examiner  
Technology Center 1600  
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A handwritten signature in black ink, appearing to read 'Johann Richter', with a large, stylized loop at the beginning.

Johann Richter, Ph.D. Esq.  
Supervisory Patent Examiner  
Technology Center 1600